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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,435	06/13/2006	Marc Mouffron	28944/50041	6600

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MILLER, MATTHIAS & HULL
ONE NORTH FRANKLIN STREET
SUITE 2350
CHICAGO, IL 60606

EXAMINER	
ALPHONSE, FRITZ	

ART UNIT	PAPER NUMBER
2112	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/596,435	MOUFFRON ET AL.	
	Examiner	Art Unit	
	FRITZ ALPHONSE	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 June 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/21/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in regard to the preliminary amendment filed on 6/13/2006. Claims 1-13 have been presented for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The Information Disclosure Statement (IDS) submitted on 9/21/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Oath/Declaration

4. The Oath/Declaration filed on 5/09/2006 is accepted.

Drawings

5. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Objections

7. Claim 1 is objected to because of the following informalities: The claim lacks a preamble. Applicant is suggested to rewrite claim 1 in proper format (for example method claim 1 is not recited in proper step format) clearly discerning or separating the preamble from the body of the claim as is done in claim 7. Appropriate correction is required.

Claim 1 requires indentation. Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(m). Appropriate correction is required.

It appears that a period is missing at the end of claims 1 and 7. All the claims (for example claims 1 and 7), should end with a period. Appropriate correction is required.

8. Claims 2, 4, 8 and 10 are objected to because of the following informalities: the terms "MAC, Hash-Mac, MD5, SHA-1, SHA-236" should be spelled out (the first time "MAC, Hash-Mac, MD5, SHA-1, SHA-236" is used, the actual language that defines the abbreviation should be spelled out). Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 4 and 10 recite the limitations "the group comprising the MD5 function, the SHA-1 function, the SHA-256 function" in lines 2-3 of the claims. There is insufficient antecedent basis for this limitation in the claim.

11. Claims 6 and 12 recite the limitations "the combination of a pseudorandom function" in line 2 of the claims. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 1-3, 5, 7-9, 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonifas (U.S. Pat. 6,898,753) in view of Bolourchi (U.S. Pat. No. 6,915,473).

As to claim 1, Bonifas discloses a method of transmitting information with verification of transmission errors (see Abstract; where Bonifas discloses transmission of data frames and verifies the validity of the received data so as to detect and identify received erroneous data frames). Bonifas teaches a useful information message is transmitted in a determined frame while being associated with a determined number of transmission error verification bits also transmitted in said determined frame (col. 3, lines 37-44, where Bonifas teaches cyclic redundancy verification data (CRC), which represents the useful information message, associated in each data frame and the totality of data formed is encoded in accordance with a RCPC code).

Bonifas does not explicitly disclose a determined number p_1 of the p transmission error verification bits form a seal obtained from the useful information message using a determined sealing function, where pl is a number less than p, and wherein the $p-p_1$ remaining transmission error verification bits form a cyclic redundancy code calculated from the useful information message.

However, in the same field of endeavor, Bolourchi (figs. 4A-B) discloses a method and system for implicit user equipment identification (col. 4, lines 1-33, where Bolourchi teaches numbers M and N (corresponding to p) of transmission error verification bits forms mask 112 (representing a sealing function) obtained from the useful message (CRC field 106) is transmitted in a determined frame while being associated with a determined number of transmission error verification bits).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to modify Bonifas with the teachings of Bolourchi. Doing so would provide an efficient method for assigning common data channels for transmission of data so as to eliminate separate processing.

As to claim 2, Bonifas does not explicitly disclose the transmission error verification bits are calculated at the MAC protocol layer, and are then delivered to a channel coder at the physical layer. However, the limitations are obvious and well known in the art, as evidenced by Bolourchi (fig. 9; col. 7, lines 26-36). See the motivation for the same reason provided in claim 1 above.

As to claims 3 and 5, Bonifas does not explicitly disclose a method, wherein the seal is obtained by truncating to p_l the result of the sealing function which is obtained on a number of bits greater than p_l; and wherein the results of the sealing function is obtained directly on pl bits,

However, the limitations are obvious and well known in the art, as evidenced by Bolourchi (fig. 4B; col. 4, lines 20-31, 58-65, where Bolourchi teaches mask 112 (representing a sealing function) obtained from the useful message (CRC field 106) is transmitted in a determined frame while being associated with a determined number of transmission error verification bits). See the motivation for the same reason provided in claim 1 above.

As to claim 7, Bonifas discloses a device for transmitting information with verification of transmission errors (col. 1, lines 5-15), including: means for transmitting (col. 3 lines 15-17, where Bonifas teaches data frames sent by a transmitter) in a determined frame a useful information message associated with a determined number p of transmission error verification bits also transmitted in said determined frame (fig. 1; col. 3, lines 33-44, where Bonifas teaches data transmitted into each frames includes cyclic redundancy verification data (CRC) corresponding to error verification bit).

Bonifas does not explicitly disclose means for obtaining a seal from the useful information message using a determined sealing function, which seal forms a determined number pl of said p transmission error verification bits, where pl is a number less than p, the p-pl remaining bits forming a cyclic redundancy code calculated from the useful information message.

However, in the same field of endeavor, Bolourchi (figs. 4A) discloses a method and system for implicit user equipment identification (col. 4, lines 1-33, where Bolourchi teaches

numbers M and N (corresponding to p) of transmission error verification bits form a seal (or mask 112) obtained from the useful message (CRC field 106) is transmitted in a determined frame while being associated with a determined number of transmission error verification bits disclose).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to modify Bonifas with the teachings of Bolourchi. Doing so would provide an efficient method for assigning common data channels for transmission of data so as to eliminate separate processing.

As to claim 8, Bonifas does not explicitly disclose means for calculating transmission error verification bits are calculated at the MAC protocol layer, and are then delivered to a channel coder at the physical layer. However, the limitations are obvious and well known in the art, as evidenced by Bolourchi (fig. 9; col. 7, lines 26-36). See the motivation for the same reason provided in claim 1 above.

As to claims 9 and 11, Bonifas does not explicitly disclose a device including means for obtaining the seal by truncating to p_1 the result of the sealing function which is obtained on a number of bits greater than p_1; and the means for obtaining the results of the sealing function is obtained directly on p_1 bits.

However, the limitations are obvious and well known in the art, as evidenced by Bolourchi (col. 4, lines 20-31, 58-65).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to modify Bonifas with the teachings of Bolourchi. Doing so would

provide an efficient method for assigning common data channels for transmission of data so as to eliminate separate processing.

As to claim 13, the claim has substantially the limitations of claim 7. Therefore, it is analyzed as previously discussed in claim 7 above.

Allowable Subject Matter

14. Claims 4, 6, 10 and 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 4 and 10 contain allowable subject matter because none of the cited references either singular or in combination discloses the limitations "the sealing function is of Hash-MAC type with key, with a Hash function selected from the group comprising the MD5 function, the SHA-1 function, the SHA-256 function and sealing functions designed on the basis of a block encryption algorithm."

Claims 6 and 12 contain allowable subject matter because none of the cited references either singular or in combination discloses the limitation "the sealing function comprises the combination of a pseudo-random generation function and of a non-linear coding function."

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman, can be reached at (571) 272-3644.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3824

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fritz Alphonse/

Examiner, Art Unit 2112

March 30, 2009